

New York State: Occupational Health and Safety Surveillance in New York State – Occupational Health Indicators (July 1, 2010 – June 30, 2011)

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BRIEF OVERVIEW OF PROJECT

This project supports general occupational health surveillance activities including the occupational health indicators, the NYS Occupational Health Clinic Network, the Heavy Metals Registry, and special projects.

ACCOMPLISHMENTS AND OUTPUTS

Occupational Health Indicators

- The New York State Department of Health (NYSDOH) has collected all 19 designated occupational health indicators (OHIs), and has added an additional indicator on hospitalizations for work-related low back disorders.
- Some of the OHIs have been calculated at the county level and provided to the Community Health Assessment Clearinghouse to improve community access to occupational health data in a user-friendly environment.
 - Three-year rates on work-related hospitalizations and elevated blood lead levels (≥ 25 mcg/dL) - http://www.health.ny.gov/prevention/prevention_agenda/healthy_environment/index.htm
 - Three-year rates for each county compared to the NYS rate for all pneumoconiosis hospitalizations, asbestosis hospitalizations, work-related hospitalizations, elevated blood lead levels for both ≥ 10 mcg/dL and ≥ 25 mcg/dL, and fatal work-related injuries - <http://www.health.ny.gov/statistics/chac/chds.htm>
 - Three-year rates for each county mapped for all pneumoconiosis hospitalizations, asbestosis hospitalizations, work-related hospitalizations, and elevated blood lead levels among adults (≥ 10 mcg/dL) <http://www.health.ny.gov/statistics/chac/chai/index.htm>
- Staff are working to incorporate information from the adult blood lead indicator into the Environmental Public Health Tracking (EPHT) program at the state level.

Special Projects

- A MOU with the NYS Workers Compensation (WC) Board has been written, approved and submitted for the appropriate signatures which will allow us to gain access to WC data for use in identifying the burden of occupational injuries and diseases.

- We have been approved to access the National Poison Control System data for New York, a real-time surveillance source that can be used to identify possible occupational cases. We are piloting the feasibility of the system to identify occupational cases.
- Staff continue to collaborate with the NYS Young Workers Safety and Health Project to bring the Passport to Safety to 5000 high school students in NYS. This is an on-line training course about occupational safety and health issues.
- NYSDOH has completed analysis of a study comparing work-relatedness as identified from medical records to hospitalization data using proxy indicators of payment by Workers' Compensation for a subset of inpatient amputations, outpatient amputations, and outpatient carpal tunnel syndrome cases. This report has been submitted for publication in a peer-reviewed journal.
- A study examining the mortality experience of World Trade Center responders has been completed and submitted for peer-reviewed publication.
- Staff has completed an analysis of blood mercury data reported from 2001 to 2008. This will be submitted for peer-reviewed publication.

Presentations

- World Trade Center Responders Fatality Investigation Program. NYC Mayor's WTC Medical Working Group, August 2010, New York NY.
- "Fundamentals of Industrial Hygiene and Occupational Fatal Injury Prevention". Environmental and Occupational Epidemiology course, March 2011, SUNY Albany School of Public Health
- Occupational health surveillance. Environmental and Occupational Epidemiology course, March 2011, SUNY Albany School of Public Health.
- Use of proxy variables to identify work-relatedness in hospitalization data. CSTE annual meeting, June 2011, Pittsburgh PA.
- Winnable Battles in Occupational Health. CSTE annual meeting, June 2011, Pittsburgh PA.
- World Trade Center Responders Fatality Investigation Program. CSTE annual meeting, June 2011, Pittsburgh PA.

OUTCOMES

POTENTIAL OUTCOMES

- NYSDOH participated in Occupational Health Awareness and Education week - a weeklong event in NYS highlighting occupational health and safety issues, centered around Workers Memorial Day.

Publications

- Wuellner SE, Walters JK, St. Louis T, Leinenkugel K, Rogers PF, Lefkowitz D, Davis LK, Gelberg KH, Zak MJ, Castillo DN. Nonfatal Occupational Injuries and Illnesses Among Older Workers – United States, 2009. *Morbidity and Mortality Weekly Report* 2011; Vol 60(16):503-508.

- Zhu M, Fitzgerald EF, Gelberg KH. Exposure sources and reasons for testing among women with low blood lead levels. *International Journal of Environmental Health Research*. Published online 03 May 2011: <http://dx.doi.org/10.1080/09603123.2010.550035>
- Gelberg KH, Brissette I, Cummings K. Evaluation of a Communications Campaign to Increase Physician Reporting to a Surveillance System. *Public Health Reports*; 2011;Vol 126(1):19-27.
- Zhu M, Fitzgerald EF, Gelberg KH, Lin S, Druschel C. Maternal low-level lead exposure and fetal growth. *Environmental Health Perspectives*, 2010; Vol 118(10):1471-1475.

Fact Sheets

- Silicosis: Silica and Road Construction, located at: http://www.health.ny.gov/environmental/workplace/lung_disease_registry/silicosis_road.htm
- Lead Poisoning: Lead and Road Construction, located at: http://www.health.ny.gov/environmental/lead/education_materials/fact_sheets/road_construction.htm

FUTURE PLANS

- Staff are working on a multi-year summary of the OHIs including trend analyses.
- Staff are working on a report summarizing data from the Heavy Metals Registry for 2006 – 2010.
- Staff will be pilot testing and working towards incorporation of the adult blood lead information into the Environmental Public Health Tracking (EPHT) program.
- Staff will evaluate the *Passport to Training* online training course for youth to determine if there were changes in knowledge and behaviors.
- Staff will continue to explore opportunities to incorporate occupational health information into other NYSDOH activities.

New York State: Fatality Assessment and Control Evaluation (FACE) Program (July 1, 2010 – June 30, 2011)

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BRIEF OVERVIEW OF PROJECT

The New York State Department of Health (NYSDOH) Fatality Assessment and Control Evaluation (FACE) program investigates work-related fatalities where appropriate prevention methods or materials are not available. NY FACE also works with partners in high-risk industries to develop prevention materials to reduce injuries and fatalities.

ACCOMPLISHMENTS AND OUTPUTS

Ski Industry Project

Employees of ski facilities in the U.S. have the highest non-fatal injury rate of 16.5 per 100 workers, four times the average injury rate of private industries (BLS 2007). New York State has the largest number of ski centers in the United States. Most of the ski mountains are located in economically depressed areas and many workers are from low income backgrounds. NY FACE partnered with Ski Areas of New York, Inc. (SANY), a trade association representing approximately 43 ski areas in New York State to develop injury prevention measures.

Logging/tree-work Injury Prevention Project

NY FACE received the funding from the Northeast Agricultural Center (NEC) to conduct a project titled “Preventing Logging Injuries among Upstate New York Agricultural Workers”. A total of 61 people including dairy, maple and Christmas tree farm and landscaping company workers and owners, and agricultural educators attended the six Game of Logging (GOL) workshops. NY FACE partnered with Herkimer County Soil and Water Conservation District, Resource Conservation & Development (RC&D) Council, Cornell Cooperative Extension and GOL in conducting the workshops. All trainees expressed great interest in learning the safe cutting techniques and injury prevention measures including using proper PPE. The trainees shared stories on why they decided to attend the training: many of them had injuries or close-calls when using chainsaws and they all agreed that it was imperative to learn the tree-work safety if they wanted to carry on the farm duties without being injured.

NY FACE staff received the annual Catalyst Award from Black River-St. Lawrence RC&D Council, Inc. for NY FACE’s collaboration with the RC&D Council to bring

logging safety training courses to the farmers, property owners and business owners in the region.

Posters

- “Prevent Struck-by Injuries during Snowmaking”
<http://www.health.ny.gov/environmental/investigations/face/training/docs/struckby.pdf>
- “Prevent Musculoskeletal Injuries during Snowmaking”
<http://www.health.ny.gov/environmental/investigations/face/training/docs/musculoskeletal.pdf>
- “Prevent Injuries While Traveling across the Snowmaking Area”
<http://www.health.ny.gov/environmental/investigations/face/training/docs/traveling.pdf>
- “Providing High Risk Populations with Tree-work Safety Knowledge-A Public Health Approach for Injury Prevention”. October 19-21, 2010. The FACE Annual Conference in Morgantown, WV

Training Cards

- “Prevent Struck-by Injuries during Snowmaking”
<http://www.health.ny.gov/environmental/investigations/face/training/docs/preventstruckcard.pdf>
- “Prevent Musculoskeletal Injuries during Snowmaking”
http://www.health.ny.gov/environmental/investigations/face/training/docs/musculoskeletal_tipstrip.pdf
- “Prevent Injuries While Traveling across the Snowmaking Area”
http://www.health.ny.gov/environmental/investigations/face/training/docs/traveling_tipstrip.pdf
- “Footwear Wisdom for Snowmakers”
<http://www.health.ny.gov/environmental/investigations/face/training/snowmaking/footwear.htm>

Newsletter articles

- “Cooperative Extension Brings Game of Logging to Local Farmers” published by *St. Lawrence County Agricultural News*
- “District Brings Game of Logging to Local Farmers” published by *Herkimer Water District Conservation News*

Presentations

- “Game of Logging (GOL) for Farmers”. June 14, 2011. The New York Center for Agricultural Medicine and Health (NYCAMH) Advisory Board meeting
- “Fundamentals of Industrial Hygiene and Occupational Fatal Injury Prevention”. March 7, 2011. The Environmental and Occupational Epidemiology class in SUNY School of Public Health

Workshops

- Game of Logging-for-Farmers in Ballston Spa, NY on November 12, 2010
- Game of Logging-for-Farmers in Herkimer, NY on November 29, 2010
- Game of Logging-for-Farmers in Canton, NY on December 10, 2010

- Game of Logging-for-Farmers in Ellicottville, NY on February 10, 2011
- Game of Logging-for-Farmers in Branchport, NY on February 19, 2011
- Game of Logging-for-Farmers in Amboy Center, NY on March 23, 2011

OUTCOMES

POTENTIAL OUTCOMES

- Staff provided assistance to RC&D Council in receiving funding of \$9,000 from NEC to provide chainsaw safety workshops for rural farm and land owners. Based on the model of GOL, RC&D conducted six chainsaw safety workshops attended by 204 people. The trainees ranged from landowners, utility company employees, university grounds crews, maple producers, snowmobile trail crews, ATV trail crews, mountain bike trail crews, hiking trail crews, highway and fire departments. Ages ranged from teenagers to grandparents. Many people commented that they had been operating a chainsaw for years and felt that they knew what they were doing but learned a lot from the workshop. Many people also remarked that they were going to purchase chaps right away after seeing the safety demonstration. One gentleman from a snowmobile club attended one class and then brought his son and two friends to a subsequent class.
- Staff sent two NY FACE investigation reports: (04NY012) *Flagger Dies after being Struck by a Pickup Truck in a Highway Work Zone* and (05NY039) *Three Construction Workers Killed after being Struck by a Bus in a Highway Work Zone* along with the information about NY FACE to Mr. Gary China, CSEA Occupational Safety & Health Specialist 2 in Capital Region Office. Staff met Mr. China at the Construction Career Day while Mr. China was doing a presentation on driving safety in highway workzones. Mr. China expressed interest in these reports and wanted to use them for future training.

Reports

- FACE Report 07NY013: “Mechanic Dies after being Pulled into a Snow Thrower”
<http://www.health.ny.gov/environmental/investigations/face/07ny013.htm>
- FACE Report 07NY092: “Newspaper Carrier Killed in a Two-car Head-on Collision”
<http://www.health.ny.gov/environmental/investigations/face/07ny092.htm>

INTERMEDIATE OUTCOMES

- The monthly column FACEValue of the National Safety Council (NSC) Magazine “Safety+Health” featured a NY FACE investigation report (07NY013) *Mechanic Dies after being Pulled into a Snow Thrower*. The NSC is a non-for-profit international public service organization with the mission to educate and influence people to prevent accidental injuries and deaths. NSC has members representing 18,600 companies with 8.8 million employees from a broad spectrum of industries in 33,300 locations around the world.
- Two NY FACE investigation reports (07NY080 *Mechanic Killed When Aerial Work Platform Collapses* and 07NY015 *Construction Laborer Dies after Falling off Collapsed*

Precast Concrete Floor Slab) were twittered by NIOSH. The NIOSH Construction Program has launched the twitter site www.twitter.com/NIOSHConstruct; it has the latest in construction safety and health information from NIOSH and its partners.

- Fatal occupational case information (2009-2010) were provided to the Labor-Religion Coalition of New York State and Central New York Council for Occupational Safety and Health (CNYCOSH). The information were used by the Coalition to develop brochures to commemorate Workers Memorial Day and by CNYCOSH for a Workers' Memorial Day presentation and a training.

Ski Industry Project

- Mr. Scott Brandi, the President of SANY, praised the NY FACE's effort in preventing injuries in snowmaking. SANY disseminated NY FACE's snowmaking cards (150 sets) and posters (100 sets) to all SANY members.
- Mr. Edward Kucskar of the Safety and Health Unit of NYS Department of Environmental Conservation forwarded the posters and cards to Belleayre Ski Center suggesting the Center use them for employee training.
- After receiving the snowmaking posters and cards, Mr. Dave Byrd, the President of National Ski Areas Association (NSAA) proposed to share injury data and technical information with NY FACE and collaborate with NY FACE in disseminating the posters and cards nationwide and developing new safety products.
- Ms. Guizzotti, an inspector for the Industry Inspection Bureau (IIB), Division of Safety and Health of NYS Department of Labor, proposed to help disseminating the posters and cards to the non-SANY members in New York State. The Bureau inspects public assembly places and equipment such as amusement rides and ski lifts.
- The training cards and posters were mailed to Massachusetts (28 sets) and Michigan (30 sets) FACE programs to be disseminated to ski areas in those states.
- Mr. Chris Adams, the OSHA area director in Syracuse office, forwarded the snowmaking posters and cards to Mr. Richard Mendelson, the Deputy Regional Administrator and requested the information to be shared with other OSHA Regions. Mr. Mendelson sent them to all ten OSHA Regions.

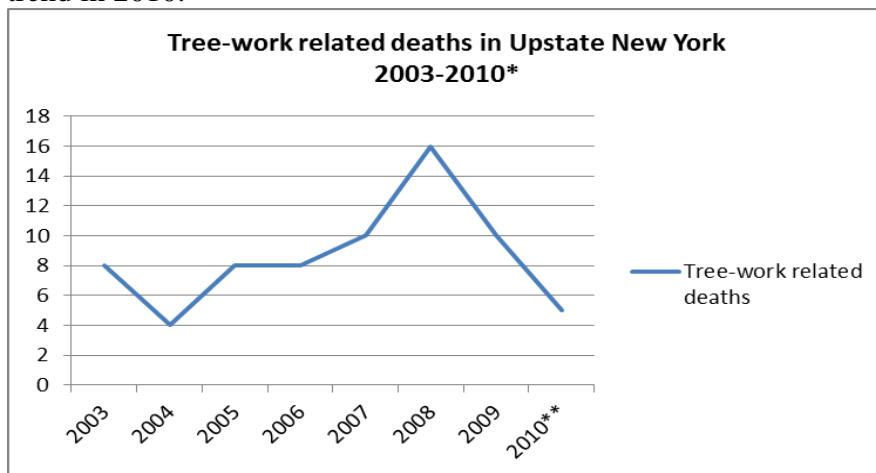
Logging/tree-work Injury Prevention Project

- During the GOL training in Herkimer, many trainees expressed interest in purchasing personal protective equipment (PPE) following the instructor's discussion on the importance of using PPE. Therefore, Ms. Lindsay, the coordinator of RC&D contacted an area logging supplier Hud-Son Forest Equipment who agreed to issue 10% off coupons to all GOL trainees. To date, one trainee (10%) purchased a pair of chaps.
- Jim Sollecito, the owner of Sollecito Landscaping Nursery in Syracuse attended the GOL training in Amboy Center and provided his employee with the Logging Field Guide.
- Mr. Pete Goderie, the owner of BTF-Wholesale and Goderie's Tree Farm requested to host one of the GOL workshops. The tree farm occupies 250 acres of land in Fulton County producing nursery stock, Christmas trees and supporting woodlots. Mr. Goderie stated that his employees would greatly benefit from the GOL training. Mr. Goderie sent his son to a GOL workshop and provided the Logging Field Guides to his employees.
- Professor Dennis who teaches "Principles and Practices of Light Construction" for both fall and spring semesters at Hudson Valley Community College every year ordered the

Field Guides for all 74 students in his class after receiving a copy from NY FACE staff at the Construction Career Day. A portion of the course is Site Development during which the students learn to use chainsaws.

END OUTCOMES

The total number of tree-work deaths in upstate New York increased every year between 2004 and 2008. In 2009, the NY FACE started the intervention targeting tree-work related fatal injuries. The total number of deaths declined first time in 2009 and continued the downward trend in 2010.



**Data source: CFOI*

***2010 data was preliminary*

FUTURE PLANS

- Disseminate snowmaking safety posters and cards to NY ski areas during the winter season 2011-2012.
 - Collect feedback, revise the posters and cards if necessary and prepare for expanded dissemination state and nationwide.
- Research and develop training syllabus on OSHA Focus Four hazard identification for municipal code enforcement officers; and
- Continue disseminating Logging Field Guides through collaborating with partners.

New York State: Pesticide Poisoning Surveillance Program (July 1, 2010 – June 30, 2011)

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BRIEF OVERVIEW OF PROJECT

The New York State Department of Health (NYSDOH) Pesticide Poisoning Registry (PPR) was established in 1990 and requires a) physicians and health facilities to report suspected or confirmed pesticide poisonings, and b) clinical laboratories to report depressed acetylcholinesterase results, indicative of some pesticide exposures, within 48 hours. Intervention is structured around individual reports. These may indicate an unanticipated hazard of a new product or the first report of a cluster of cases. The interview is an opportunity to discuss the hazards of pesticides, and ways to reduce or eliminate exposure through IPM, product substitution or use of protective equipment. In cases of occupational exposures or clusters, an industrial hygiene consultation is available.

ACCOMPLISHMENTS AND OUTPUTS

Case Ascertainment and Follow-up

- The Pesticide Poisoning Registry received over 310 reports of suspected or confirmed pesticide poisoning cases during the last calendar year. Reports stem from hospitals, physicians, clinical laboratories, National Poison Data System (NPDS), Poison Control Centers, and self-reports. In addition, staff receive the adverse effects reports provided to the Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA 6(a)(2)). Investigations of the reports involve the collection of medical records and interview of cases.
- A total of 268 cases reported to the poison control centers (PCC) from 2007 to 2009 were reviewed. While all cases did not meet the national reporting criteria to be included in the Pesticide Poisoning Registry, having access to the NPDS has proven to be a significant resource for the program.
 - PCC cases were also matched to both inpatient and outpatient hospital discharge data since the reporting of these cases from NPDS does not include personal identifiers.
 - Triggers have been developed to allow for real-time alerts of pesticide poisoning cases.

Outreach and Education Strategies

The PPR strives to improve recognition, diagnosis, and reporting of pesticide poisoning among physicians.

- The existing program brochure was updated and is located at: <http://www.health.ny.gov/publications/2787.pdf>. New sections include “Why Should I Report?” which provides an explanation of the importance of pesticide surveillance. There is also a section on who should report, what should be included in a report, and how to report a case of suspected or confirmed pesticide poisoning. A brief discussion is also provided on “What are pesticides?”
- Notification of the Pesticide Poisoning Report Form was included on the Department of Health’s Health Provider Network (HPN), along with an explanation of the PPR and how to report cases. HPN is a secure, internet based communications infrastructure that provides highly secure and efficient exchange of reporting, surveillance, statistical, and general information with its public health and health provider partners.
- PPR staff attended the Immigration Workers Rights Awareness Weekend. Material was provided from the PPR along with other programs in the NYSDOH Center for Environmental Health in both Spanish and English.

Software Development

The NYSDOH developed, maintains, updates and improves the SENSOR Pesticide Incident Data Entry and Reporting (SPIDER) software program. This program is available for states conducting pesticide poisoning surveillance and allows for uniform collection of pesticide poisoning incidents across the country.

- SPIDER was updated to include all EPA product data.
- NIOSH Sector names was added to the NAICS tables to enable data grouping by sector.
- A new cross-tabulation tool was added which enables retrieving data based on product type, signal word, chemical class or active ingredient.
- A new data retrieval tool was developed in the SPIDER software to automatically produce all tables and charts used by states for annual reports. The tool used COM automation to move SPIDER data query results to Excel, and builds a formatted table and corresponding chart.

Collaborations and Partnerships

- A MOU with the NYC Department of Health and Mental Hygiene and NYC Poison Control Center has been written, approved and submitted for the appropriate signatures which will allow the PPR to collaborate with these entities to identify cases and submit personal identifying information to the PPR for purposes of obtaining medical records and interviewing exposed individuals.
- The PPR continue to collaborate with the Bureau of Toxic Substance Assessment (BTSA).
 - We regularly obtain FIFRA 6 (a)(2) reports from this Bureau which contains federally reported consumer initiated incidents where adverse health effects occur.
 - BTSA also supplies the PPR with information on cases where spills have been reported concerning the release of pesticides.
 - BTSA provides information on exposed individuals to the PPR when a pesticide has been used and follow-up details are required, or an intervention to prevent or reduce pesticide exposure is necessary.

- The PPR continues to collaborate with the NYS Department of Environmental Conservation (DEC).
 - When an interview reveals that a referral to DEC may be necessary, PPR staff make the referral and try to follow-up on the outcome to determine if violations and citations were a part of their investigation.
 - DEC will also make the PPR aware of certain types of pesticide exposures. These are normally cases that would not have been reported to the PPR.

OUTCOMES

POTENTIAL OUTCOMES

- The existing program brochure was updated and is located at: <http://www.health.ny.gov/publications/2787.pdf>.
- The program produced the *Landlord and Tenant's Guide to Pest Management* after registry staff identified unlicensed applications by building managers and landlord that resulted in pesticide exposures. This is located at: <http://www.health.ny.gov/publications/3204/index.htm>
- While bed bugs may not pose a public health threat, the misuse and abuse of pesticides to treat bed bugs is becoming a public health issue. There are indications that off-label use of pesticides not designed to treat bed bugs are being used, as well as an increase in restricted use products (RUPs) to treat bed bugs used by unlicensed individuals. In response to this emerging issue, we have developed a web page that addresses these issues and offers alternative pest management practices: <http://www.health.ny.gov/environmental/pests/bedbugs.htm>
- Soo-Jeong Lee, Prakash Mulay, Brienne Diebolt-Brown, Michelle J. Lackovic, Louise N. Mehler, John Beckman, Justin Waltz, Joanne B. Prado, Yvette A. Mitchell, et al. Acute illnesses associated with exposure to fipronil-surveillance data from 11 states in the United States 2001-2007. *Clinical Toxicology* (2010) 48, 737-744.
- Lee SJ, Mehler L, Beckman J, Diebolt-Brown B, Prado JB, Lackovic M, Waltz J, Mulay P, Schwartz A, Mitchell Y, Moraga-McHaley S, Gergely R, Calvert GM. Acute Pesticide Illnesses Associated with Off-Target Pesticide Drift from Agricultural Applications — 11 States, 1998–2006. *Environmental Health Perspectives* – doi:10.1289/ehp.1002843 June 2011.
- Calvert GM, Keralis JM, Kasner E, Mehler L, Beckman J, Bonnar-Prado J, Lee S, Diebolt-Brown B, Mulay P, Lackovic M, Waltz J, Schwartz A, Mitchell Y, Moraga-McHaley S, Gergely R. Gender differences in acute pesticide poisoning among farm workers in the United States, 1998-2006. *Submitted for publication*.

INTERMEDIATE OUTCOMES

- The *Landlord and Tenant Guide to Pest Management* has been distributed by NYS DEC to owners/management companies dealing with affordable housing in Rockland County.

FUTURE PLANS

- PPR staff will collaborate with Cornell Cooperative Extension (CCE) to supplement their pesticide applicator training with pesticide safety education. A formal curriculum will be developed to ensure that the content meets industry standards for pesticide poisoning prevention practices. CCE hosts trainings at the beginning of each year.
- In the past, the Pesticide Poisoning program has only conducted targeted outreach to health care facilities that have Emergency Rooms, risk managers of hospitals, Primary Care physicians that are reported by an exposed person, and healthcare provider newsletters to reach a wide variety of physicians. This year, the program plans to target Environmental and Occupational Health specialists and Environmental Medicine specialists. These groups may treat patients with pesticide poisonings and may not be aware of the state-mandated reporting requirements.
- Pesticide Poisoning program staff will distribute comic books developed by the Migrant Clinicians Network that are written in Spanish and provide information to: 1) parents on how to minimize pesticide exposure in children; 2) women of reproductive age and pregnant women understand the risks of pesticide exposure and how to minimize those risks; and 3) families to describe pesticides, minimize risks to pesticide exposure, and how to respond in the event of a pesticide exposure or poisoning.
- Pesticide Poisoning program staff will distribute the *Landlord and Tenant Guide to Pest Management*. The plan is to distribute this information to landlord and tenant associations throughout the state to inform them of NYS DEC Law; to make property managers and landlords aware of the steps necessary to become certified pesticide applicators in NYS; and to make tenants aware of their rights regarding pesticide applications in their dwelling units.
- The PPR will continue to explore methods to ease the reporting requirement for physicians. One option being explored is developing a form for online submission of reports.

New York State: Work-related Asthma Surveillance Program (July 1, 2010 – June 30, 2011)

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BRIEF OVERVIEW OF PROJECT

The New York State Department of Health (NYSDOH) Occupational Lung Disease Registry conducts surveillance of work-related lung disease, including work-related asthma (WRA), through state mandated reporting. Under the reporting regulations, physicians, health facilities and clinical laboratories are required to report any patient with clinical evidence of occupational lung disease. Emergency department data and hospital discharge data are used to identify potential cases seen in hospitals. The NYSDOH also partners with other NYSDOH programs and State Agencies to identify WRA cases. The program analyzes the WRA data from the Occupational Lung Disease Registry and population based data from the Behavioral Risk Factor Surveillance System Asthma Call Back Survey to characterize WRA in New York State. The program conducts worker and company follow-up and provides intervention services to help prevent ongoing or future exposures, and to protect other persons who may be at risk.

ACCOMPLISHMENTS AND OUTPUTS

Case Ascertainment and Follow-up

Work-related asthma (WRA) program staff received over 400 potential WRA cases this past year from hospitals, physicians and New York State's Occupational Health Clinic Network (OHCN). Investigations of the reports from hospitals and physicians involve the collection of medical records and interview of cases. The OHCN reports all patient visits to the NYSDOH using the same patient data software, which includes a dedicated section to report pertinent information on WRA cases. All clinics in the OHCN have expertise in occupational health and the ability to perform workplace evaluations and offer clients prevention and intervention services. Therefore, NYSDOH often does not perform further follow-up on reports received from the OHCN.

- A WRA questionnaire to ascertain information on the cases' work and exposure history, symptom history, and medication use was developed to facilitate the interviews.

Data Analysis and Dissemination

Through our partnerships with the NYSDOH Public Health Information Group and the State Asthma Plan, BOH submitted a chapter on WRA to be published in the NYS Asthma Surveillance Summary Report to be released later this year. Data sources for information on WRA in this report came from the OLDR, OHCN, hospital discharge data, and emergency

department data. The report is published biannually and widely distributed to approximately 1,000 individuals and organizations in NYS. The 2009 Asthma Surveillance Summary Report is located at:

http://www.health.ny.gov/statistics/ny_asthma/pdf/2009_asthma_surveillance_summary_report.pdf

Public Health Interventions

Staff conducted both worker and company follow-up to provide intervention services to help prevent ongoing and future exposures. In addition to phone consultations, several industrial hygiene site visits were conducted:

- A site visit to an international snack food processing facility was conducted to evaluate potential exposures, including food flavorings and cleaning agents. The visit included meetings with local and corporate representatives, a walk-through survey of the facility, collection of air and bulk samples from the one production line that was using flavorings on that day, interview of workers and review of the company's written health and safety programs.
- A site visit to observe and evaluate aluminum welding processes at a company that manufactures pool parts led to recommendations to improve the health and safety practices of the company.
- Site visits were also made to several schools as part of a healthy schools initiative during which potential exposure to asthmagens were identified.
- Staff has been collaborating on NYSDOH's response to formaldehyde exposure associated with hair straightening products. There are more than 100 Brazilian Keratin hair straightening treatments distributed within NYS and staff is collaborating with other state health departments and OSHA to better characterize formaldehyde exposure levels to salon workers and patrons and to develop mitigation options.

Outreach and Education Strategies

Because a successful physician-based surveillance system is contingent upon physicians being able to recognize a work-related condition, BOH strives to improve recognition and diagnosis of WRA among physicians:

- When a report of WRA is received from a source other than the case's physician, the non-reporting physician is identified and sent information about the Occupational Lung Disease Registry and reporting requirements.
- The Occupational Lung Disease website underwent revisions to improve visibility and access to information, including resources for consultation and referrals and tools for recognizing and diagnosing WRA.
- Presentation: "Occupational Lung Disease Registry", NYS OHCN, September 2010, Troy NY.

Patients who are informed with health information about their condition can influence their own outcomes and treatment. Therefore, BOH has developed educational material and outreach strategies to increase the recognition and awareness of WRA among adults with asthma:

- The NYSDOH has been working to develop tools for self-management of asthma via mobile phone technology. Work is underway to pilot an emergency department (ED) text

messaging initiative that aims to provide the patient with educational text messages, including information on WRA, following an ED visit.

- The WRA program collaborated with the NYS Asthma Program to include “work” as part of a Trigger Tracker Guide for patients located at: http://www.health.ny.gov/publications/4990/asthma_triggers_tracking.pdf
- The Occupational Lung Disease website was updated to include a page specifically for workers, where they can get answers to common questions and access available resources located at: http://www.health.ny.gov/environmental/workplace/lung_disease_registry/

Collaborations and Partnerships

- A MOU with the NYS Workers Compensation (WC) Board has been written, approved and submitted for the appropriate signatures which will allow us to gain access to WC data for use in identifying WRA cases.
- We have been approved to access the National Poison Control System data for New York, a real-time surveillance source that can be used to identify possible WRA cases. We are piloting the feasibility of the system to identify WRA cases.
- We have been working with NYSDOH Pesticide Poisoning Registry to identify cases that are relevant to both registries. We are identifying methods to collect information pertinent to both registries without duplicating efforts and easing the burden on the identified case as well as the reporting source.
- We have been collaborating with the New York Fatality Assessment and Control Evaluation (FACE) program to identify any work-related asthma deaths.
- The National Acute Hazardous Substance Incidents Surveillance and Prevention Program (NAHSISP) collects information on hazardous substance spills and releases, including whether the victim was an employee or a responder, the type of injury, and the medical outcome. We have been working with this program to determine the usefulness of this information for identifying possible WRA cases.
- We have been actively involved in the NYSDOH cross-organizational response to asthma which applies a systematic evidence-based approach in surveillance, environmental and occupational health, health care delivery and quality and community interventions. This approach is organized around three operational levels: 1) Executive Leadership Team, 2) Guidance Team, and 3) Core Teams. Staff from the Bureau of Occupational Health sit on all three of these teams.
- We have continued our collaboration and integration of WRA into other public health programs. Staff continue to work with the State Asthma Plan to incorporate work-related asthma into its work. We also collaborate with programs on school health as well as green cleaning.
- We participated in the NIOSH/State WRA Surveillance meeting in Oakland CA and continue our involvement with state and national partners conducting surveillance of WRA.
- We are an active member of the Asthma Call Back Survey Workgroup and the WRA section sub-workgroup. The subgroup revised the WRA section of the 2012 survey and developed the WRA chapter for the Asthma Call Back Survey User Manual.

OUTCOMES

POTENTIAL OUTCOMES

- A Hazard Alert was developed to inform hair salon workers and owners about formaldehyde exposure associated with the use of Brazilian Keratin hair straightening treatments (BKT) and is located at:
<http://www.health.ny.gov/environmental/chemicals/formaldehyde/workers.htm>. This alert will be distributed to salons by the NYS Department of State which licenses salon workers.
- A separate hazard alert was developed for hair salon patrons and people who use at-home BKT treatments and is located at:
<http://www.health.ny.gov/environmental/chemicals/formaldehyde/consumer.htm>
- Updates were made to the Occupational Lung Disease toolkit, a resource for health professionals on WRA and reporting to the Occupational Lung Disease Registry. It now includes additional information for the physician to communicate about WRA to the patient, including our “Is Your Asthma Work-related” brochure, a related poster for waiting/exam rooms, and a Trigger Tracker guide for patients. It is located at:
http://www.health.ny.gov/environmental/workplace/lung_disease_registry/toolkit/toolkit.htm

FUTURE PLANS

The WRA program will continue to address its specific aims with the following activities:

- Continue work on the emergency department text messaging initiative.
- Develop NYS WRA factsheets and disseminate the information on our website and through the NYSDOH Facebook page and Twitter.
- Develop an on-line portal to share information with our partners on WRA program activities, availability of products and enhance knowledge of WRA.
- Explore other sources of WRA data including the Bureau of Emergency Medical Services, Office of Minority Health and the Migrant and Seasonal Farmworker Program.
- Develop a continuing medical education (CME) course to raise awareness about WRA.